

2014 Vermont Water Chestnut Management Program Summary

Vermont Department of Environmental Conservation December 2014

2014 Successes:

- VTDEC mechanical harvesting occurred as far as one and a half miles south of the Narrows of Dresden, working on both sides of Lake Champlain, about half a mile further south than in 2013.
- Of 77 Lake Champlain sites targeted for management in 2014, 28 had less than 20 water chestnut rosettes, 6 more sites with low numbers than in 2013.
- Of 27 Other Waterbody sites targeted for management in 2014, 9 had no water chestnut rosettes.
- 100% of mechanically harvested spoils were composted.

Confirmed Vermont Locations (28):

- Big Marsh Slough, Highgate (MNWR)
- Lake Bomoseen, Hubbardton *controlled*
- Brookside Pond, Orwell
- Bullis Pond, Franklin
- Cabot-Clark Marsh, Highgate (MNWR)
- Lake Champlain: 77 lake or associated tributary sites between Swanton, Vermont and Dresden, New York on both the Vermont and New York sides of the lake including Missisquoi Bay.
- Coggman Pond, Benson
- Cranberry Pool, Highgate (MNWR)
- Dead Creek, Addison
- Lake Shaftsbury, Shaftsbury
- Lemon Fair River
- Little Lake, Poultney
- Lily Pond, Poultney
- Long Marsh Channel
- North Springfield Reservoir, Springfield
- Lake Paran, North Bennington
- Parsons Mill Pond, Benson
- Pelkeys Swamp, Benson
- Richville Pond, Orwell
- Root Pond, Benson
- Porter Lake, Ferrisburg
- small pond, Bennington *controlled*
- Horton Pond, Benson
- Phillips Ponds, Benson
- small pond, Benson Landing *controlled*
- Singing Wetland, North Bennington
- Lake Carmi **NEW**
- Duval Ditch **NEW**

Project Cost: \$636,390 est. (\$588,495 in 2013)

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| ▪ Mechanical Harvesting | \$287,916 |
| ▪ Handpulling | \$150,000 |
| ▪ Composting | \$6,300 |
| ▪ TNC grant | \$20,000 |
| ▪ VTDEC field supervisor (2014-15) | \$154,094 |
| ▪ VTDEC administration (estimate) | \$15,000 |
| ▪ Off-load site cost and road maintenance (estimate) | \$3,080 |

Partners:

- Lake Champlain Basin Program (LCBP)
- Missisquoi National Wildlife Refuge
- New York State Department of Environmental Conservation (NYSDEC)
- New York, Town of Dresden
- The Nature Conservancy (TNC)
- US Fish & Wildlife Service (USFWS)
- Numerous volunteer groups and individuals

Funding Sources:

- | | |
|---------------------|-----------|
| ▪ LCBP | \$95,000 |
| ▪ USACE | \$197,619 |
| ▪ USFWS Partnership | \$10,000 |
| ▪ VTDEC | \$326,346 |
| ▪ USFWS ANS Plan | \$8,645 |

Elements Summary:

Mechanical Harvesting¹ - Contracted to Aquatic Control Technology, Inc.

- Mechanical harvesting ended about half a mile south of last year's mark. Contract for \$287,916 (\$281,480 in 2013).
- Mechanical harvesting operation worked exclusively from Red Rock Access.
- Began July 7 and continued until August 15th for a total of 752 mechanical harvesting hours (726.5 hours in 2013) at 7 Lake Champlain sites; one harvesting site also hand pulled.
- Approximately 7,350 cubic yards or 997.5 tons (9,058 cubic yards or 1229.3 tons in 2013) of water chestnut spoils removed.
- 100% of harvested spoils, 525 loads, composted at one farm site (via contract to Champlain Valley Composting Co.).
- NYSDEC conducted a mechanical harvesting program independent of the VTDEC effort which aided in the overall north to south management effort. The NYSDEC program was managed by the town of Dresden. Harvesting occurred from Barrel Bay to Ottenburgh Ramp in Dresden to South Bay near Whitehall, New York at an estimated cost of \$70,000.



The Drowned Lands last major harvesting site in Southern Lake Champlain (VTDEC photo)

Handpulling¹ - Contracted to Lakeside Restoration Services

- Contracted handpulling began June 23 and continued until August 19 for a total of 4,267.5 hours (4,090 hours in 2013). Sixty one Lake Champlain sites spread over a distance of 88 miles of Vermont and 41 miles of New York shoreline were targeted; a number of northern areas were targeted, many twice for regrowth.
- VTDEC, partners (TNC, Missisquoi National Wildlife Refuge, and Lewis Creek Association) and others provided handpulling efforts totaling 800 hours and targeted 18 sites in Lake Champlain and in other waterbodies.
- Twenty five of 27 other water bodies with water chestnut were surveyed in 2014; handpulling occurred as needed. Singing Wetland in Bennington was too shallow to survey and North Springfield Reservoir was not surveyed.

Surveying

- 20 surveys of Lake Champlain or "other" Vermont waters by VTDEC staff.

Education

- Distributed water chestnut identification and search techniques materials through the VIP and Greeter Program trainings.
- Maintained user awareness signs posted at public access areas.

Three new infestation sites:

- One new site in Dead Creek at Nortontown Road in Addison, one in the wetland at the northern end of Lake Carmi in Franklin, and the third site in a drainage ditch at the Duval Farm in Benson.

¹ Of the contracted mechanical harvesting effort, 34% of the budget was spent on the Vermont Lake Champlain shoreline and 66% on the New York shoreline. Of the contracted handpulling effort, 60% was spent on the Vermont side of the lake and 40% on the New York side of the lake.

